

player identification information and, preferably, secondary authorization information (e.g., a password, PIN number, stored value card number, predefined key sequences, etc.), the player may be permitted to access a player's account. As one potential optional security feature, the handheld gaming machine 110 may be configured to permit a player to only access an account the player has specifically set up for the handheld gaming machine 110. Other conventional security features may also be utilized to, for example, prevent unauthorized access to a player's account, to minimize an impact of any unauthorized access to a player's account, or to prevent unauthorized access to any personal information or funds temporarily stored on the handheld gaming machine 110.

[0064] The player-accessible value input device 118 may itself comprise or utilize a biometric player information reader which permits the player to access available funds on a player's account, either alone or in combination with another of the aforementioned player-accessible value input devices 118. In an embodiment wherein the player-accessible value input device 118 comprises a biometric player information reader, transactions such as an input of value to the handheld device, a transfer of value from one player account or source to an account associated with the handheld gaming machine 110, or the execution of another transaction, for example, could all be authorized by a biometric reading, which could comprise a plurality of biometric readings, from the biometric device.

[0065] Alternatively, to enhance security, a transaction may be optionally enabled only by a two-step process in which a secondary source confirms the identity indicated by a primary source. For example, a player-accessible value input device 118 comprising a biometric player information reader may require a confirmatory entry from another biometric player information reader 152, or from another source, such as a credit card, debit card, player ID card, fob key, PIN number, password, hotel room key, etc. Thus, a transaction may be enabled by, for example, a combination of the personal identification input (e.g., biometric input) with a secret PIN number, or a combination of a biometric input with a fob input, or a combination of a fob input with a PIN number, or a combination of a credit card input with a biometric input. Essentially, any two independent sources of identity, one of which is secure or personal to the player (e.g., biometric readings, PIN number, password, etc.) could be utilized to provide enhanced security prior to the electronic transfer of any funds. In another aspect, the value input device 118 may be provided remotely from the handheld gaming machine 110.

[0066] The player input device 124 comprises a plurality of push buttons on a button panel for operating the handheld gaming machine 110. In addition, or alternatively, the player input device 124 may comprise a touch screen 128 mounted to a primary display 114 and/or secondary display 116. In one aspect, the touch screen 128 is matched to a display screen having one or more selectable touch keys 130 selectable by a user's touching of the associated area of the screen using a finger or a tool, such as a stylus pointer. A player enables a desired function either by touching the touch screen 128 at an appropriate touch key 130 or by pressing an appropriate push button 126 on the button panel. The touch keys 130 may be used to implement the same functions as push buttons 126. Alternatively, the push buttons may pro-

vide inputs for one aspect of the operating the game, while the touch keys 130 may allow for input needed for another aspect of the game. The various components of the handheld gaming machine 10 may be connected directly to, or contained within, the casing 112, as seen in FIG. 1b, or may be located outboard of the casing 112 and connected to the casing 112 via a variety of hardwired (tethered) or wireless connection methods. Thus, the handheld gaming machine 110 may comprise a single unit or a plurality of interconnected parts (e.g., wireless connections) which may be arranged to suit a player's preferences.

[0067] The operation of the basic wagering game on the handheld gaming machine 10 is displayed to the player on the primary display 114. The primary display 114 can also display the bonus game associated with the basic wagering game. The primary display 114 preferably takes the form of a high resolution LCD, a plasma display, an LED, or any other type of display suitable for use in the handheld gaming machine 110. The size of the primary display 114 may vary from, for example, about a 2-3" display to a 15" or 17" display. In at least some aspects, the primary display 114 is a 7"-10" display. As the weight of and/or power requirements of such displays decreases with improvements in technology, it is envisaged that the size of the primary display may be increased. Optionally, coatings or removable films or sheets may be applied to the display to provide desired characteristics (e.g., anti-scratch, anti-glare, bacterially-resistant and anti-microbial films, etc.). In at least some embodiments, the primary display 114 and/or secondary display 116 may have a 16:9 aspect ratio or other aspect ratio (e.g., 4:3). The primary display 114 and/or secondary display 116 may also each have different resolutions, different color schemes, and different aspect ratios.

[0068] As with the free standing gaming machine 10, a player begins play of the basic wagering game on the handheld gaming machine 110 by making a wager (e.g., via the value input device 118 or an assignment of credits stored on the handheld gaming machine via the touch screen keys 130, player input device 124, or buttons 126) on the handheld gaming machine 110. In at least some aspects, the basic game may comprise a plurality of symbols arranged in an array, and includes at least one payline 132 that indicates one or more outcomes of the basic game. Such outcomes are randomly selected in response to the wagering input by the player. At least one of the plurality of randomly selected outcomes may be a start-bonus outcome, which can include any variations of symbols or symbol combinations triggering a bonus game.

[0069] In some embodiments, the player-accessible value input device 118 of the handheld gaming machine 110 may double as a player information reader 152 that allows for identification of a player by reading a card with information indicating the player's identity (e.g., reading a player's credit card, player ID card, smart card, etc.). The player information reader 152 may alternatively or also comprise a bar code scanner, RFID transceiver or computer readable storage medium interface. In one presently preferred aspect, the player information reader 152, shown by way of example in FIG. 1b, comprises a biometric sensing device.

[0070] Turning now to FIG. 2, the various components of the gaming machine 10 are controlled by a central processing unit (CPU) 34, also referred to herein as a controller or